Timucuan Ecological and Historic Preserve On-Line Field Guide

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Park Information

The Timucuan Ecological and Historic Preserve covers 46,000 acres and offers visitors a chance to experience unspoiled, Florida wilderness. Nature trails wind through hardwood forests, wetlands, and scrub vegetation. Home to diverse populations of plants and animals, the Preserve was once inhabited by the Timucua Indians at the time of European contact.

Safety

Summers can be very hot and humid. Hats, sunscreen, and plenty of water are recommended. Insect repellent is also necessary. It is important to be aware of your surroundings while in the Preserve. Be on the lookout for poison ivy, plants with thorns and for occasional snakes basking on trails. Poison ivy (*Toxicodendron radicans*) is a vine bearing plant with three leaves and a sap that can cause very uncomfortable rashes and allergic reactions. It can be confused with Virginia creeper (*Parthenocissus quinqefolia*) which has five leaves.



Poison Ivy

Habitats of the Timucuan Preserve

Pine Flatwood

Pine Flatwoods are typically open woodlands that are dominated by pine trees. These flatwoods are characterized by having an herbaceous (plants with fleshy stems rather than woody stems) layer with an open canopy of pines and an extensive shrub layer. Flatwoods once covered much of the land in Florida. Today, pine flatwoods cover approximately 50% of the natural land area in this state. There are a variety of soil types in pine flatwoods, but they are generally poorly drained, sandy, and acidic. This ecosystem is most commonly used for timber, for recreation, and by wildlife. Some common trees one might come upon in flatwoods include the Slash Pine (*Pinus elliottii*) and the Longleaf Pine (*Pinus palustris*).



Pine Flatwoods

Maritime Hammock

Maritime Hammocks are wet hardwood forests found between uplands and wetlands with a diverse understory of woody species and broad leafed evergreen trees and shrubs. Maritime Hammocks are heavily influenced by salt spray from the ocean. The soils in this habitat typically consist of sand or peat. The forest canopy helps protect trees from being uprooted due to heavy winds and storms. They also provide shelter to the understory plants and prevent major temperature fluctuations in the soil. Common species found in Maritime Hammocks are the American Beautyberry (Callicarpa americana), Trumpet Creeper (Campsis radicans), and Yellow Jessamine (Gelsemium sempervirens).



Maritime Hammocks

Salt Marsh

Salt Marshes are coastal wetlands occurring where freshwater from the land mixes with sea water (brackish). They are identifiable by the different grasses, sedges, and rushes which vary in shades of gray, brown, and green. Salt marshes are one of the most biologically productive habitats on the planet due to the daily tidal surges that bring in nutrients. Marsh plants also serve as predator protection for various animals. This is a childhood home for a variety of Florida's popular marine life.



Salt Marsh

Shell Midden

Native people such as the Timucua Indians who once inhabited this land had a natural diet consisting mainly of oysters and shellfish. When walking the trails of the Theodore Roosevelt Area near Round Marsh one will encounter the Shell Midden habitat. Here among the leaf litter will be found mounds of oyster shells. These shell mounds are the "garbage heaps" discarded by the Native people of the ancient past after a good meal of this abundant natural resource. This "manmade" habitat is actually very good for plants. The strong shells layered in the soil can help prevent trees from being uprooted during intense storms. The shells help retain heat in the soils during winter which may increase plant survival during colder temperatures.



Shell Midden

Common Flora of the Timucuan Preserve

During a visit to various areas within the preserve, one may encounter a wide variety of plants. Some species are more abundant than others. This section of the field guide will describe the most common plants one might see during a visit. Listed are the common and scientific names of each plant, its habit (growth form), habitat type, flowering period, pollinators, size, where it is can be found in the park, and other interesting information such as present and past medicinal uses.



Water Oak leaves

Species name: Quercus nigra
Common name: Water Oak

Habit: Tree

Habitat type: Maritime hammocks

Flowering period: Spring

Pollinators: Wind

Size: 50-60 ft

Location in Park: Ft. Caroline
National Memorial- Hammock Trail
Information: This species is often
used for timber and fuel or planted as
a shade tree. It is also well suited for
wildlife habitat and environmental
forestry.



Species name: Magnolia grandiflora
Common name: Southern Magnolia

Habit: Tree

Habitat type: Maritime hammocks Flowering period: April to June

Pollinators: Beetles Size: Up to 90 ft tall

Location in Park: Ft. Caroline National

Memorial- Hammock Trail

Information: This tree is commonly used as an ornamental. The tree attracts squirrels, opossums, quail and turkey, which eat the seeds.

Magnolia tree



Magnolia leaf



Loblolly Pine

Species Name: Pinus taeda
Common Name: Loblolly Pine

Habit: Tree

Habitat Types: Pine flatwoods Flowering Time: July/ August

Pollinators/ Fruit Dispersers: Wind, woodpeckers

Size: 25-30 ft in height

Location in Park: Theodore Roosevelt Area- Willie Browne Trail

Uses: Seeds are eaten for food by songbirds and small mammals. Standing dead trees are frequently used for cavity nests by woodpeckers. Human uses include furniture, pulpwood, and plywood. Pines may also be planted to stabilize eroded or damaged soils.



Spanish Moss

Species Name: Tillandsia usneoides

Common Name: Spanish Moss

Habit: Maritime hammocks- epiphytic Habitat types: Maritime hammocks

Flowering Period: Early spring throughout summer

Pollinators/Fruit dispersers: Insects, wind, and birds

Size: 3-6 ft in length, may reach 20 ft in length

Location in Park: Theodore Roosevelt Area- Spanish Pond Trail

Uses: Spanish moss is used in arts and crafts or for bedding in flower

gardens. It is also known to have been worn by Timucua women.



Cabbage Palm

Species name: Sabal palmetto
Common name: Cabbage Palm

Habit: Tree

Habitat type: Maritime hammocks Flowering period: April to August Pollinators: Bees and other insects

Size: Up to 80 ft in height Location in Park: Theodore

Roosevelt Area- Willie Browne Trail Information: This is the official tree of the state of Florida. Native people including the Timucua used this tree to thatch their huts and make baskets. They provide food for many species of animals such as deer, bear, and raccoons.



Slash Pine

Scientific Name: Pinus elliottii

Common Name: Slash Pine

Habit: Tree

Habitat Type: Pine flatwoods, Maritime hammocks

Pollinators: Wind

Pollination Time: Pollen shed January-February

Size: 60-100 ft in height

Location in Park: Theodore Roosevelt area- Willie Browne Trail

Uses: Timber, heavy wood and high resin content used for construction of

poles, railroad ties, pilings, turpentine, and rosin





Christmasberry

Species Name: Lycium carolinianum

Common Name: Christmasberry

Habit: Deciduous shrub

Habitat types: Salt marsh

Flowering Period: Blooms all year

Pollinators/Fruit dispersers: Bees and butterflies; birds

Size: 4-8 ft in height

Location in Park: Theodore Roosevelt Area- Timucuan Trail

Uses: In China, Christmasberry has been used to treat coughs from pulmonary tuberculosis, deficient liver and kidney function problems, diabetes, fever, and pneumonia. It is believed that Christmasberry promotes the reattachment of periodontal tissue after removal of diseased dental root surfaces. Folk medicine reports Christmasberry being used to treat cancer, dizziness, headaches, high blood pressure, hyperglycemia, hypoglycemia, and rheumatism.



Yaupon Holly

Species name: *Ilex vomitoria*Common name: Yaupon Holly

Habit: Shrub

Habitat type: Maritime hammocks

Flowering period: Spring

Pollinators: Wasps

Size: Up to 20-25 ft in height

Location in Park: Ft. Caroline National Memorial- Hammock Trail

Information: The Timucua used this plant to make their "black drink." This drink contained large amounts of caffeine and was used as a purgative for ceremonial purposes. The fruits attract various species of birds, black

bears, and small mammals.

Ferns

Ferns are one of several nonflowering vascular plants that possess true roots, stems, and complex leaves. This group reproduces by spores. Ferns may be the dominant form of plant life in a community in many areas of Florida. Some types of ferns one might encounter in the Preserve are the Cinnamon Fern (Osmunda cinnamomea) and the Resurrection Fern (Pleopeltis polypodioides).

Species Name: Osmunda cinnamomea

Common Name: Cinnamon Fern

Habit: Herb

Habitat Types: Ferns

Flowering Time: Non-flowering

Pollinators/Fruit Dispersers: None

Size: 2-5 ft in height

Location in Park: Ft. Caroline Area- Hammock Trail

Uses: The fibers from the roots of Osmunda are used in the potting of

orchids.



Cinnamon Fern



Resurrection Fern

Species name: Pleopeltis polypodioides

Common name: Resurrection Fern

Habit: Herb-Fern

Habitat type: Maritime hammocks- epiphytic (lives on trees)

Flowering period: Does not produce flowers

Pollinators: None

Size: Up to 1 ft in length

Location in Park: Theodore Roosevelt Area- Willie Browne Trail

Information: Though it grows on trees, this species is not a parasite. Instead, it gathers water from the rain and nutrients from dust in the air. It is called the Resurrection Fern because during dry periods it curls up to protect itself from evaporation. When it gets moisture, it unfurls, giving the appearance of coming back from the dead.



Snowberry

Species Name: Chiococca alba

Common Name: Snowberry

Habit: Evergreen shrub

Habitat types: Salt marsh

Flowering period: Periodically throughout the year Pollinators/Fruit dispersers: Butterflies, birds

Size: Up to 10 ft in height

Location in Park: Theodore Roosevelt Area- Timucuan Trail

Uses: The roots have been used to treat rheumatic disorders as well as for

other therapeutic purposes in Brazil and worldwide.



Species Name: Myrica cerifera
Common Name: Wax Myrtle

Habit: Evergreen shrub or small tree

Habitat Types: Maritime hammocks, Pine

flatwoods

Flowering period: March - June

Pollinators/Fruit dispersers: Insects, birds

Size: 6-15 ft in height

Location in Park: Fort Caroline Area-

Hammock Trail

Uses: The bark can be powdered and used as a stimulant to help treat ulcers. Extract from the wax myrtle is regarded as a cure for dysentery in some parts of the world. The wax is frequently removed from the berries in order to make soaps and candles.

Wax Myrtle



Wax Myrtle leaf



Florida Violet

Species Name: Viola sororia
Common Name: Florida Violet

Habit: Herb

Habitat Types: Maritime hammocks, Pine flatwoods

Flowering period: Spring

Pollinators/Fruit Dispersers: Birds, insects, butterflies

Size: Less than 1 foot in height

Location in Park: Theodore Roosevelt Area- Willie Browne Trail

Uses: The leaves contain high amounts of vitamins A and C and can be cooked as greens and used in salads. The petals can be used to make candies and jellies.





Southern Blueberry

Species Name: Vaccinium formosum Common Name: Southern Blueberry

Habit: Shrub

Habitat Types: Maritime hammocks

Flowering Time: June- August

Pollinators/ Fruit Dispersers: Birds, bees, butterflies

Size: Up to 12 ft in height

Location in Park: Ft. Caroline Area- Hammock Trail

Uses: Berries are edible, used for baked goods and juice.



Cockspur Pricklypear

Species name: Opuntia pusilla

Common name: Cockspur Pricklypear

Habit: Creeping succulent shrub

Habitat type: Salt marsh

Flowering period: April to May

Pollinators: Insects

Size: 6-12 in

Location in Park: Theodore Roosevelt Area- Timucuan Trail

Information: This and other pricklypear cacti are being threatened by the invasive cactus moth. The larvae of the moth feed on the cacti and can cause extensive damage. Be careful around this plant: the segments break off easily and can lodge in shoes or skin. STAY on trails for your safety and the safety of the plant!





Rusty Staggerbush

Scientific Name: Lyonia ferruginea Common Name: Rusty Staggerbush

Habit: Tree

Habitat Type: Maritime hammocks

Flowering Period: Spring

Pollinators/Fruit Dispersers: Butterflies, bees, wasps, wind, birds

Size: 8-10 ft in height

Location in Park: Theodore Roosevelt area- Spanish Pond Trail

Uses: Ornamental, gardens, flower arrangements







Saw Palmetto

Scientific Name: Serenoa repens

Common Name: Saw Palmetto

Habit: Shrub

Habitat Type: Pine flatwoods, Maritime hammocks

Flowering Period: April-July

Pollinators/Fruit Dispersers: Insects

Size: 2-7 ft in height

Location in Park: Theodore Roosevelt area- Spanish Pond Trail

Uses: All parts of the plant can be eaten. Berries were used for soft drinks in the early 1900s. This plant has also been used to treat illnesses such as whooping cough and alcoholism, and most recently prostate swelling, bladder infections, and urinary tract infections.



Scientific Name: Ceratiola

ericoides

Common Name: Florida Rosemary

Habit: Shrub

Habitat Type: Maritime hammocks Flowering Time: Spring, summer,

fall

Pollinators/Fruit Dispersers:

Wind, birds, mammals, insects

Size: 1.5-8 ft in height

Location in Park: Theodore Roosevelt area- Spanish Pond Trail Uses: This is not the species of

rosemary used in cooking.



Florida Rosemary





Reindeer Lichen

Scientific Name: Cladonia subtenuis

Common Name: Reindeer Lichen
Habit: Fruticose (branched) lichen
Habitat Type: Maritime hammocks
Dispersal: Wind-dispersed spores

Size: clumps as large as 6 in tall, 6 in wide

Location: Theodore Roosevelt Area- Spanish Pond Trail

Uses: Reindeer lichen is capable of stabilizing nitrogen levels in the soil and

indicating pollution.

Glossary

Deciduous - falling off, as leaves from a tree; not persistent

Epiphyte - plant which grows upon another plant but does not draw food or water from it

Evergreen - having green leaves through the winter

Habit - general appearance, characteristic form, or mode of growth of a plant

Habitat - environmental circumstances or kind of places where a plant grows

Herb - plant without a persistent above-ground woody stem, the stems dying back to the ground at the end of the growing season

Liana - woody, climbing vine

Shrub - woody plant, with several stems, that is shorter than a typical tree

Tree - large woody plant, usually with a single main stem or trunk

Vine - plant with the stem not self-supporting, but climbing or trailing on some support

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